

REMARKS

In response to the final Official Action of October 4, 2007, claims 1, 15 and 26 have been amended to more particularly point out and distinctly claim the invention. Support for the amendment to these claims is found in the original application as filed, including Figures 2a, 2b, 4 and 5 and the specification as originally filed, including page 5, lines 24-29, page 6, lines 14-18, and page 12, lines 2-25. No new matter is added.

Applicant's attorney would like to thank Examiner Lee for her helpful comments made during a telephone interview with the undersigned attorney on December 3, 2007 at which time the claim rejections under 35 USC §101 was discussed. Although no agreement was reached, it was indicated that if applicant was willing to amend claim 1 to recite that the recited device is a physical device, then the claim rejection under 35 USC §101 would be reconsidered.

Claim Rejections - 35 USC §101

At section 3, claims 1-11 and 27 are rejected under 35 USC §101 as directed to non-statutory subject matter. With regard to claim 1, it is asserted that the claimed method is directed to a computer implemented method of calculation. It is asserted that the claimed invention does not result in a physical transformation. Applicant respectfully asserts that the claimed invention as currently presented in amended claim 1 does define statutory subject matter.

In particular, it is specifically recited that the user interface is integrated in a physical device, that the user interface is a touch screen display and that the changing of the orientation of the user interface is changed by rotating the complete display and input control logic. Furthermore, claim 1 has been amended to recite displaying an input control logic on said user interface. Clearly, there is a useful, concrete and tangible result obtained by the recited method in that the user interface is stated as being a touch screen display, which is a physical object, and that the device in which it is integrated is a physical device. Further, the orientation of this user interface and input control logic is changed, resulting in a physical transformation. It is therefore respectfully submitted that claim 1 defines statutory subject matter.

Claims 2-11 and 27 also define statutory subject matter due to their ultimate dependency from claim 1.

Claim Rejections - 35 USC §102

At section 5, claims 1-12 and 14-29 are rejected under 35 USC §102(e) as anticipated by US patent application publication 2003/0184525, Tsai. With respect to claim 1, it is asserted that Tsai discloses a method for changing an orientation of a user interface comprising the actions recited in claim 1.

As set forth in applicant's amendment filed on July 10, 2007, Tsai discloses a method for image processing for an image displayed on a touch panel, wherein a dragging path generated by a user touching and dragging from a first point to a second point on a surface of the touch panel is obtained, a rotation angle according to a relative position between the first and second points on the surface of the touch panel is determined, and the image is rotated with the rotation angle and is displayed on the touch panel. This is shown in Figures 2A-2C of Tsai and is described at paragraphs [0020] through [0024].

As shown in Figure 2A of Tsai, the surface of the panel (21) is geometrically divided in one embodiment into four quadrants (Q1-Q4) and, as shown in Figure 2B, the user may drag on the panel from a first point (P1) in a first quadrant (Q1) to a second point (P2) in a second quadrant (Q2), and then dragging a path D with a starting point (P1) and an ending point (P2). A rotation angle between the first quadrant (Q1) and the second quadrant (Q2) is determined and the rotation of the image is performed (see paragraphs [0021] and [0022], as well as Figures 2A-2C).

Claim 1 has been amended to particularly point out and claim that the user interface is a touch screen display and further that the orientation of said touch screen display (that is, what is displayed thereon) is changed by rotating the complete display and the input control logic. Amended claim 1 specifically recites displaying the input control logic on the user interface. This is clearly seen in Figure 2b of the present invention and the accompanying description at page 12, line 28 through page 13, line 4. Specifically, in one embodiment, the dragging element (5) as shown in the three images of the mobile phone device is dragged as shown in the first panel to the second panel and then the image is reoriented as shown in the third panel. The reorientation of the complete display is shown by the image of the person and also the orientation of the input control logic (dragging element 5) is also repositioned in the third panel

corresponding to the reorientation of the complete display. Such a feature is not disclosed or suggested in Tsai which does not show a dragging element, but rather uses the drawing motion by a user for determining the reorientation of the display. Thus, in Tsai, only the display, but not an input control logic is rotated in response to the detected course of motion.

It should be noted that by reorienting the complete display and the input control logic results in the advantageous feature of the present invention, in that the display can be conveniently used via the input control logic even when the display is rotated because not only the display but also the input control logic which may, for example, comprise elements such as touch screen menus, are reoriented and displayed according to the present invention. Thus, the problem solved by the present invention is a method and device that allows for a more convenient change of an orientation of a display of a user interface, as well as the input control logic associated therewith.

Tsai does not provide a person of ordinary skill in the art with any suggestion that both the display and an input control logic displayed on the user interface are reoriented in order to allow a more convenient use of the device. This is due to the fact that only rotation of the display is disclosed in Tsai and that an input control logic is not reorientated. In Tsai, the object of the invention is to rotate an image displayed on the panel without changing the orientation of the device itself (see Figures 2A-2C of Tsai), so that in Tsai there is not need for changing an orientation of an input control logic associated with the device. Such a change would actually be contradictory to the non-rotated device as clearly evident in Figure 2C of Tsai where the orientation of the display is changed but not of the input controls, because the device itself is not rotated.

Thus, in summary, Tsai does not disclose the feature that the complete display and the input control logic are rotated. Claim 1 has been amended to particularly point out and distinctly claim the displaying of an input control logic on said user interface and further that the changing of said orientation of said user interface is the changing of the orientation of the touch screen display by rotating the complete display and the input control logic. The Office's reliance upon the Abstract and Figures 2A and 2C of Tsai does not show these features of the present invention.

More particularly and preliminarily, it should be noted that the prior art described in Tsai (Figures 1A-1C) shows that input control logic is not necessarily rotated when rotating the display. This is seen in the description of the prior art at paragraphs [0007]-[0010] and the button (14) shown in Figures 1A and 1C. The prior art discussed in Tsai clearly shows that it is not straightforward to rotate a display and the input control logic. Furthermore, not rotating both the display and input control logic results in a simpler methodology. For instance, to save costs, it may be appropriate to only design part of a touch screen display as being touch-sensitive, for instance, the region around button (14) in Figure 1A and 1C of Tsai. When rotating the display, it is then actually not possible to also rotate the input control logic (button 14) since this might move button (14) to a part of the touch screen that is not touch-sensitive.

Furthermore, even if the complete touch screen display is touch-sensitive, it must be understood how a touch screen display actually works. In particular, user input (such as touching) on the touch screen display is sensed by a controller of the touch screen display and this controller checks that the input has occurred in a region that is associated with a button or the like. If the input control logic is changed when rotating the display, the controller must update the position information of all buttons. It is thus more straightforward (since it is less complex and therefore less expensive) not to rotate the input control logic when rotating the display.

It is therefore respectfully submitted that Tsai does not disclose the reorientation of the display and the input control logic, but rather only discloses rotating the display in response to some user input.

It is therefore respectfully submitted that claim 1 as amended is not anticipated by Tsai.

Independent device claim 15 and independent device claim 26 has been amended in a manner similar to claim 1 and therefore each of these claims is also believed to be not anticipated by Tsai.

Since each of the independent claims is believed to be not anticipated by Tsai, it is respectfully submitted that all of the dependent claims are further not anticipated by Tsai due to their ultimate dependency from an allowable claim.

Furthermore, with respect to claim 1, this claim specifically recites that the course of motion is performed on said user interface by dragging an element that is displayed on said user interface. This is clearly shown in Figures 2a and 2b of the present application.

The Office states at page 4 of the final Official Action that Tsai discloses a method wherein said course of motion is performed on said user interface by dragging an element that is displayed on said user interface, relying upon the Abstract and Figures 2A-2C of Tsai and, in particular, that the hat of a snowman can be dragged. This idea of a hat element of a snowman being dragged from a first quadrant to a second quadrant with regard to Tsai is also mentioned in the "Response to Arguments" section of the final Official Action.

It is respectfully submitted that Tsai does not support the additional feature of claim 5. In particular, Tsai does not disclose that the course of motion is performed by dragging an element that is displayed on the user interface.

With respect to Figures 2A-2C of Tsai, these figures only disclose that a finger is placed on a point P1 and that then a course of motion is performed to point P2. However, both points P1 and P2 are actually not displayed on the display, but rather they are present in the figures for purposes of illustration for showing how a user would move their finger or pointer from a particular point on the display (point P1) to another point on the display (point P2). Furthermore, the hat of the snowman, which the Office identifies as the element that is dragged, is not disclosed as being touched by the user at all. Tsai only discloses that a user can "drag" a path on the panel (see paragraphs [0022]-[0024]), but that this dragging is not linked to an element that is dragged across the panel as is the case in the present invention as claimed.

It is therefore respectfully submitted that the feature recited in claim 5, that the course of motion is performed on said user interface by dragging a dragging element that is displayed on said user interface is neither anticipated nor suggested by Tsai. Providing such a dragging element is particularly advantageous since it allows one to conveniently change an orientation of a user interface. This may either be performed on a touch screen display by directly touching the dragging element or on a standard display (not a touch sensitive display) by dragging the dragging element with a standard user interface interaction device (such as a

mouse or a trackball). The dragging element functions like a handle that allows the user to rotate the orientation of the display.

As explained in the present application at page 5, line 24 through page 6, line 18, dragging a dragging element from the right upper corner to the right lower corner may cause a change of the orientation of the display by 90° clockwise, dragging the dragging element from the right upper corner to the left upper corner may cause a change of the orientation of the display by 90° counterclockwise, and dragging the dragging element from the right upper corner to the left lower corner may cause a change of the orientation of the display by 180°. This approach of triggering a rotation of a display by dragging a dragging element is believed to be superior to a gesture-based approach because the dragging element is visible on the display, whereas in the case of a gesture-based approach such as disclosed in Tsai, the user must know that drawing a gesture causes a rotation of the display.

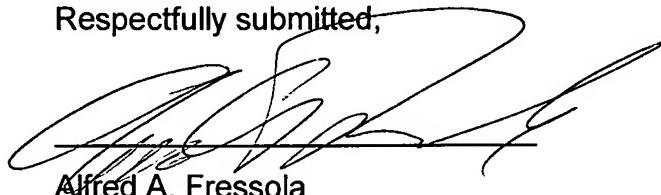
As stated in the present application at page 6, lines 14-18, the dragging element is particularly advantageous if it is a soft button that is already provided on the user interface for other purposes and is assigned additional functionality to indicate a change of the orientation of the user interface only when being dragged across the user interface.

For all of these reasons, it is respectfully submitted that dependent claim 5 is further not anticipated or suggested by Tsai.

For similar reasons, dependent device claim 21 is further not anticipated by Tsai.

In view of the foregoing, it is respectfully submitted that the present application as amended is in condition for allowance and such action is earnestly solicited.

Respectfully submitted,



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